THE FOLLOWING ARE THE ENGLISH TRANSLATION OF ANNEXES TO THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT (ARTICLE 34):

Amended Sheets (pages 17-21)

English translation of the amended sheets of International Preliminary Examination Report.

CLAIMS

- 1. Capacitive sensor including at least measuring capacitor (Cm) having a first plate and a second plate, with at least one plate being capable of to an optimal starting being moved with respect position by a measuring voltage applied between the plates in a measuring phase, characterised in that it (I1, I2, I3) for applying, includes means measuring voltage, in simultaneously to the measuring phase, an actuation voltage (Va) between said plates of the measuring capacitor, so as to bring the first and second plates substantially to the optimal starting position.
- 2. Capacitive sensor according to claim 1, characterised in that the means (I, I2, I3) for applying, in the measuring phase, an actuation voltage (Va) to a plate of the measuring capacitor include:
 - a first switch (I1) having a first terminal connected to the first plate of the measuring capacitor and a second terminal connected to a first voltage Vh, which first switch (I1) is controlled by a first clock signal (H1), and
- a second switch (I2) having a first terminal connected to the second plate of the measuring capacitor (Cm) and a second terminal connected to a first operation voltage Vp1 so that:

Vp1 = Vdd + Va

English translation of the amended sheets of International Preliminary Examination Report.

where Va is the actuation voltage and Vdd is a second voltage, which second switch (I2) is controlled by a second additional clock signal (H2) that does not overlap with the first clock signal, and

- a third switch (I3) having a first terminal connected to the second plate of the measuring capacitor (Cm) and a second terminal connected to a second operation voltage Vp2 so that the second operation voltage is written:

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Vp2 = Vref + Va,

where Vref is a reference voltage,
which third switch (I3) is controlled by the first
clock signal (H1).

3. Capacitive sensor according to claim characterised in that the second plate of the measuring capacitor (Cm) is connected to the first terminal of a fourth switch (I4) of which the second terminal is connected to the inverting input (-) of an operational amplifier (A) of which the supply voltage is voltage Vdd and of which the non-inverting input (+) is connected to the reference voltage Vref, wherein the fourth switch (I4) is controlled by the second clock signal (H2), a fifth switch (I5) and a feedback capacitance (C1) are mounted parallel between input (-) < and the output inverting operational amplifier (A), and the fifth switch (I5) is controlled by the first clock signal (H1).

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- according to claim 2, 4. Capacitive sensor characterised in that the second plate of the measuring is connected to a first plate insulation capacitor (C2) of which the second plate is connected to the inverting input (-) of an operational amplifier (A), wherein a fourth switch (Ia) controlled by the second clock signal (H2) has a first terminal first plate of the connected to the capacitor (C2), a fifth switch (Ib) controlled by the first clock signal (H1) has a first terminal connected to the second plate of the insulation capacitor (C2), the fourth (Ia) and fifth (Ib) switches have second terminals connected to one another and to a first plate of a negative feedback capacitor (C1), of which the second terminal is connected to the output of the operational amplifier (A), wherein a sixth switch (Ic) controlled by the first clock signal (H1) mounted parallel with respect to the negative feedback capacitor (C1), the operational amplifier (A) has a non-inverting input (+)connected to the reference voltage Vref of lower amplitude than the amplitude of the voltage Vh, and the second voltage Vdd is the supply voltage of the operational amplifier (A).
- 5. Capacitive sensor according to claim 2, characterised in that the second plate of the measuring capacitor (Cm) is connected to a first plate of an insulation capacitor (C2) of which the second plate is connected to the inverting input (-) of an operational amplifier (A), wherein a fourth switch (Ia) controlled by the second clock signal (H2) has a first terminal

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first plate of the insulation connected to the capacitor (C2), a fifth switch (Ib) controlled by the first clock signal (H1) has a first terminal connected to the second plate of the insulation capacitor (C2), the fourth (Ia) and fifth (Ib) switches have their second terminals connected to one another, a negative feedback capacitor (C1) has a first plate connected to the second terminals of the fourth and fifth switches by means of a sixth switch (Id) controlled by the second clock signal (H2), and to the voltage Vh by means of a seventh switch (Ie) controlled by the first clock signal (H1), and a second plate connected to the reference voltage by means of an eighth switch (If) controlled by the first clock signal (H1) and to the output of an operational amplifier (A) by means of a ninth switch (Ig) controlled by the second clock signal (H2), a tenth switch (Ic) controlled by the first clock signal (H1) having a first terminal connected to the second terminals of the fourth and fifth switches and a second terminal connected to the output of operational amplifier of which the non-inverting input (+) is connected to the reference voltage Vref, and the second voltage Vdd is the supply voltage of operational amplifier (A).

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6. Measuring method with the help of a capacitive sensor including at least one measuring capacitor (Cm) having a first and a second plate, with at least one plate being capable of being moved with respect to an optimal starting position by a measuring voltage applied between the plates in a measuring phase,

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characterised in that it includes, simultaneously to the application of a measuring voltage between the first and second plates, the application, between the first and second plates, of an actuation voltage capable of bringing the first and second plates substantially to the optimal starting position.